A Quarterly Newsletter for the Networking and Information Technology Research and Development Program

### **NITRD News Spotlight**

## National Coordination Office Welcomes New Director, Bryan A. Biegel, Ph.D.

The Networking and Information Technology Research and Development (NITRD) National Coordination Office (NCO) welcomed the appointment of its new Director, Dr. Bryan Biegel, in August 2016.

In this role, he will also serve as the Co-chair for the NITRD Subcommittee. Please join us in welcoming Dr. Biegel on his appointment. *Read more about the new Director* 

## The National Artificial Intelligence Research and Development Strategic Plan

The National Artificial Intelligence Research and Development Strategic Plan (AI R&D Plan) was released on October 12, 2016. The National Science and Technology Council (NSTC) Subcommittee on Machine Learning and Artificial Intelligence directed the NITRD Subcommittee to create a National AI R&D Plan to define the Federal strategic priorities for AI R&D, with particular attention on areas that the industry is unlikely to address. A NITRD Task Force on AI was formed to complete this work. Read the National AI R&D Plan.

#### Computational Science and Engineering Software Sustainability and Productivity Challenges Workshop Report

The Computational Science and Engineering Software Sustainability and Productivity (CSESSP) Challenges Workshop Report, released September 16, 2016, details the challenges and opportunities discussed at the NITRD sponsored multi-agency workshop CSESSP Challenges, held in Washington, D.C. on October 15-16, 2015. Production of the report involved experts from 8 NITRD agencies, more than 10 companies, and more than 15 universities.

Read the CSESSP Challenges Report.



#### **Director's Corner**

I am honored to be selected as the new Director of the NCO and Co-chair of the NITRD Subcommittee.

I look forward to continuing the great work of NITRD and the awesomeness it brings.

I believe that NITRD helps make "awesome" happen because of the intelligence, creativity, and dedication of people, when thoughtfully applied to important challenges. A couple of examples:

NITRD coordinated a Smart Cities Task Force that was announced during Smart Cities Week, September 26-29, 2016, which highlighted significant advances and new efforts towards making our communities work better for us. This task force was charged with developing a Federal Smart Cities Strategic Plan and an online guide to Federal resources. *Learn more*.

The National Artificial Intelligence (AI) R&D Strategic Plan was released October 12, 2016. The Plan, which outlines a path to realize the amazing opportunities of AI, was developed by a NITRD-coordinated task force including dedicated experts from 16 Departments and Federal agencies. *Learn more*.

This newsletter highlights many more examples of the giant leaps that NITRD helps enable. They started as big ideas by someone who was inspired to do more for their agency and our nation.

If you have a bold idea about how NITRD can help advance agency missions and National priorities, we'd like to hear from you. We want to make amazing things happen!

Please pass the "awesome sauce", and don't hesitate to contact us at: NITRDLeadsIT@nitrd.gov

-Bryan Biegel

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### **New NITRD Groups and Activities**

The NITRD Program, being the Nation's coordinator of Federally funded work in advanced IT, is committed to providing the R&D foundations necessary for continued U.S. technological leadership and meeting the needs of the Federal government, and staying on the leading edge of IT revolution by responding to Administration initiatives through standing up new focus groups in critical areas and multi-agency activities.

- National Strategic Computing Initiative (NSCI): On Tuesday, November 15, 2016 at the 2016 Supercomputing Conference, a NITRDorganized panel composed of senior government personnel representing some of the key NSCI agencies and the White House will provide an update on the NSCI, offer longterm strategic vision, and address implementation details. Learn more about the NSCI panel at SC'16.
- National Broadband Research Agenda (NBRA): The NITRD Subcommittee was tasked to develop a National Broadband Research Agenda. In conjunction with the National Science Foundation (NSF) and the National Telecommunications and Information Administration (NTIA), NITRD hosted a planning workshop on October 4, 2016, to form a Task Force group that could lead this development. The Federal Government has an important role, to promote broadband deployment and adoption including: identifying promising research areas, analytical methodologies, and data collection methods. Learn more about the NBRA.

Check out the NCO/NITRD YouTube videos from workshops, presentations, and meetings! https://www.youtube.com/user/TheNCONITRD

#### **NITRD Talks**

# Dr. Vinton G. Cerf "Digital Vellum and Archives"

On August 12, 2016, the NITRD Faster Administration of Science and Technology Education and Research (FASTER) Community of Practice (CoP) hosted Dr. Vinton G. Cerf, Vice President and Chief Internet Evangelist, Google, sharing his perspectives regarding the idea of Digital Vellum and the challenge of long-term preservation of digital information. Learn more about Dr. Cerf's talk.

"So I do want to say something about NITRD because I was involved fairly early on in that activity. I served on the President's Information Technology Advisory Committee.

And I can tell you that that was actually a very powerful, very effective cross-correlation across the agencies, even back then in the early 1990s.

And it continues, today, to be a really powerful resource for coordinating peoples' R&D development.

It's evidence that it's possible to have inter-agency cooperation.

And in these contentious times, it's nice to see that the agencies can work together to produce better research."

- Dr. Vinton G. Cerf

# Dr. Laura Biven "Research Data Management"

On July 18, 2016, the NITRD FASTER CoP hosted Dr. Laura Biven, Senior Science and Technology Advisor, Office of the Deputy Director for Science Programs, U.S. Department of Energy (DOE), discussing the details of the DOE Data Management Plan, its requirements, the history behind them, and some thoughts for future work in the area of data management. Learn more about Dr. Biven's talk.

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The NITRD Program was established by the High-Performance Computing (HPC) Act of 1991 with the overall objective of ensuring the United States' leadership in advanced computing. The NITRD Program is the Nation's coordinator of Federally funded work on advanced information technology (IT).

Now in its 25th year, the NITRD Program consists of 21 Federal member agencies and over 35 participating agencies, and is one of the oldest and largest of the formal Federal programs that engage in multi-agency coordination activities. The multi-agency NITRD Program seeks to provide the research and development (R&D) foundations for assuring continued U.S. technological leadership and meeting the needs of the Federal Government for advanced IT.

The NITRD Program also seeks to accelerate development and deployment of advanced IT in order to maintain world leadership in science and engineering, enhance national defense and homeland security, improve US productivity and competiveness, protect the environment, and improve the health, education and quality of life for all Americans.



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